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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: Transicoil

DATE: NOV 17 1989

FROM: Donna Abrams
Air/Superfund Coordinator (3AM11)

TO: Jim Feeney
RPM (3HW21)

THRU: Joseph W. Kunz, Chief
Projects Management Section (3AM11)

I have reviewed the draft RI/FS for this site from an air quality perspective and my comments are attached. If you have any questions, please contact me at 7-9134.

Attachments

cc: Marcia Spink (3AM10)
Alyce Fritz (3HW20)
Jack McGrogan, PADER Harrisburg

AR000172

Review of Superfund Sites

Date Received: 11/08/89

Site Name: Transicoil

Site Location: Montgomery County, PA

Population of Area: 4,243

Principal Toxic Air Pollutants: Trichloroethylene (TCE), Trichloroethane (TCA)

Site Description: This site encompasses approximately 50 acres. Since approximately 1952 until the present time, the facility has been used for the purpose of manufacturing DC and synchro electric motors, which are used by the aerospace industry. Various solvents have been used in small, limited quantities at the facility for the purpose of degreasing engine parts and equipment. One of the earliest solvents used was TCE which was stored and used at the facility until approximately 1976. At that time, the facility began to substitute TCA in the place of TCE for degreasing.

Are There Any Air ARARs That Apply? If So, Explain.
The National Ambient Air Quality Standards (NAAQS) contained in 40 CFR Part 50 would apply. Specifically, the NAAQS for ozone would apply. This is a 1-hour standard of 0.12 parts per million, concentration not to be exceeded more than once per year (on the average over a three year period). Compliance with this standard should be determined via ambient air monitoring (at the site boundary) of volatile organic precursors to ozone, if these emissions are generated as a result of site remediation.

Pennsylvania's New Source Review requirements for sources locating in ozone nonattainment areas would apply if a remediation alternative is used which will transfer volatile organic contaminants (VOCs) into the air. Pennsylvania's requirements are that the Best Available Control Technology (BACT) be applied to any new source of VOC emissions. BACT for air stripping of groundwater may require add-on air controls, such as carbon adsorption.

OSWER has recently issued Directive 9355.0-28 on air strippers in ozone nonattainment areas such as this (see attached). Although not an ARAR per se, it is a "to be considered" requirement. This Directive requires mandatory add-on controls for air strippers with an actual emission rate in excess of 3 pounds per hour (lb/hr) or 15 lb/day or a potential (i.e., calculated) rate of 10 tons per year (TPY) of total VOCs. The calculated rate assumes 24-hour operation, 365 days per year. The control levels are applied on a facility basis. For the purposes of this guidance, facility is defined as a contiguous piece of property under common ownership. This Directive may be less stringent than Pennsylvania's New source Review ARAR.

Should The State Air Office Be Contacted? The State Air Office should be involved in determining compliance with State air ARARs should air emissions be generated on site as a result of remediation.

Analytical Assessment of Air Pollutants and Recommendations:

On Page 2-10 and 2-11, under "Identification of Data Gaps", a data gap should be identified which specifies the evaluation of concentrations of VOCs in the ambient air if there is any indication that VOCs in air are present. If necessary, upwind/downwind sampling should be done to evaluate potential air impacts on- and off-site. The air monitors used should have detection limits low enough to detect harmful concentrations of contaminants (i.e., TCE and TCA) in the air. Also, meteorological data should be collected during monitoring to determine wind speed and direction. As an alternative, predictive modeling can be used to evaluate potential concentrations of contaminants in air.

On Page 3-1, under "On-Site Characterization", the report should include an air impact analysis.

On Page 3-3, under "Soil Sampling/Analysis", this analysis should also be used to evaluate potential ambient air impacts resulting from VOCs in the soil during remediation. Sweep air should be used to simulate disturbed emissions. Samples without sweep air can be used to map the horizontal extent of soil gas plumes.

On Page 5-4, under "Environmental Fate and Transport", the third sentence should read "They volatilize readily from surface water and surface soil, and thus are commonly not significant risk problems in those media, but are potentially a significant risk in the air."

On Page 5-5, under "Exposure Scenarios", inhalation during excavation of soil and/or remediation of groundwater should be identified (unless data is gathered which discounts this scenario).

On Page 5-6, under "Comparison to ARARs", the ARARs and TBC identified above should be included here.

On Page 6-4, under "Detailed Analysis of Remedial Alternatives", in accordance with the criteria for overall protection of human health and the environment, I would like to recommend that an air impact analysis be performed, via dispersion modeling, prior to generating air emissions as a result of remediation. Additionally, ambient air monitoring should be performed during remediation to verify modeled predictions. These air impact analyses should be performed in accordance with interim final guidance which has recently been completed in this area. This four-volume series is available upon request. Please let me know if you need any copies.

Prepared By: Donna Abrams Donna Abrams
Air/Superfund Coordinator

Reviewed By: Joseph W. Kunz, Chief
Projects Management Section